

Missouri Department of Natural Resources



PUBLIC NOTICE

DRAFT MISSOURI STATE OPERATING PERMIT

DATE: July 7, 2006

In accordance with the state Clean Water Law, Chapter 644, RSMo, Clean Water Commission regulation 10 CSR 20-6.010, and the federal Clean Water Act, the applicants listed herein have applied for authorization to either discharge to waters of the state or to operate a no-discharge wastewater treatment facility. The proposed permits for these operations are consistent with applicable water quality standards, effluent standards and/or treatment requirements or suitable timetables to meet these requirements (see 10 CSR 20-7.015 and 7.031). All permits will be issued for a period of five years, unless noted otherwise in the Public Notice for that discharge.

On the basis of preliminary staff review and the application of applicable standards and regulations, the Missouri Department of Natural Resources (MDNR), as administrative agent for the Missouri Clean Water Commission, proposes to issue a permit(s) subject to certain effluent limitations, schedules, and special conditions. The proposed determinations are tentative pending public comment.

Persons wishing to comment on the proposed permit conditions are invited to submit them in writing to the Department of Natural Resources, St. Louis Regional Office, 7545 South Lindbergh, Suite 210, St. Louis, Missouri 63125, ATTN: Thomas M. Siegel, Chief, Permits and Engineering. Please include the permit number in all comment letters.

Comments should be confined to the issues relating to the proposed action and permit(s) and the effect on water quality. The MDNR may not consider as relevant comments or objections to a permit based on issues outside the authority of the Clean Water Commission, (see Curdt v. Mo. Clean Water Commission, 586 S.W.2d 58 Mo. App. 1979).

All comments must be postmarked by August 6, 2006 or received in our office by 5:00 p.m. on August 9, 2006. The requirement of a signed document makes it impossible to accept email comments for consideration at this time. Comments will be considered in the formulation of all final determinations regarding the applications. If response to this notice indicates significant public interest, a public meeting or hearing may be held after due notice for the purpose of receiving public comment on the proposed permit or determination. Public hearings and/or issuance of the permit will be conducted or processed according to 10 CSR 20-6.020.

Copies of all draft permits and other information including copies of applicable regulations are available for inspection and copying at DNR's website, <http://www.dnr.mo.gov/env/wpp/wpcp-pn.htm>, or at the Department of Natural Resources, St. Louis Regional Office, 7545 S. Lindbergh, Suite 210, St. Louis, Missouri 63125, between the hours of 8:00 a.m. and 5:00 p.m., Monday through Friday.

Public Notice Date: July 7, 2006
Permit Number: MO-0121363
St. Louis Regional Office

FACILITY NAME AND ADDRESS	NAME AND ADDRESS OF OWNER
Augusta WWTF Hackman Road Augusta, MO 63332	St. Charles County PWS #2 100 Water Drive O'Fallon, MO 63368
RECEIVING STREAM & LEGAL DESCRIPTION	TYPE OF DISCHARGE
Bigelow's Creek NW ¼, Sec. 13, T44N, R1E St. Charles County	Domestic (reissue)

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES
MISSOURI CLEAN WATER COMMISSION



MISSOURI STATE OPERATING PERMIT

In compliance with the Missouri Clean Water Law, (Chapter 644 R.S. Mo. as amended, hereinafter, the Law), and the Federal Water Pollution Control Act (Public Law 92-500, 92nd Congress) as amended,

Permit No. MO-0121363
Owner: St. Charles Co. PWSD #2
Address: 100 Water Drive, O'Fallon, MO 63368

Continuing Authority: Same as above
Address: Same as above

Facility Name: Augusta WWTF
Facility Address: Hackman Road, Augusta, MO 63332

Legal Description: NW 1/4, Sec. 13, T44N, R1E, St. Charles County
Latitude/Longitude: 38° 34' 20.2" N / 90° 52' 9.3" W

Receiving Stream: Bigelow's Creek (C)
First Classified Stream and ID: Bigelow's Creek (C) (ID #1608)
USGS Basin & Sub-watershed No.: 10300200-140002

is authorized to discharge from the facility described herein, in accordance with the effluent limitations and monitoring requirements as set forth herein:

FACILITY DESCRIPTION

Outfall #001 – POTW - SIC #4952

Three cell aerated lagoon/sludge is retained in lagoon
Design population equivalent is 600.
Design flow is 60,000 gallons/day (0.060 MGD).
Actual flow is approximately 30,000 gallons/day
Design sludge production is 12.0 dry tons/year.

This permit authorizes only wastewater discharges under the Missouri Clean Water Law and the National Pollutant Discharge Elimination System; it does not apply to other regulated areas. This permit may be appealed in accordance with Section 644.051.6 of the Law.

Effective Date

Doyle Childers, Director, Department of Natural Resources
Executive Secretary, Clean Water Commission

Expiration Date

Mike Struckhoff, Director, St. Louis Regional Office

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS					PAGE NUMBER 2 of 5	
					PERMIT NUMBER MO-0121363	
The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective upon issuance and remain in effect until March 31, 2009 . Such discharges shall be controlled, limited and monitored by the permittee as specified below:						
(OUTFALL NUMBER AND EFFLUENT PARAMETERS)	UNITS	INTERIM EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
<u>Outfall #001</u>						
Flow	MGD	*		*	Once/month	24-hour Estimate
Biochemical Oxygen Demand ₅ **	mg/L		65	45	Once/quarter****	Grab
Total Suspended Solids**	mg/L		110	70	Once/quarter****	Grab
pH – Units	SU	***		***	Once/quarter****	Grab
Ammonia as N	mg/L	*		*	Once/quarter****	Grab
Temperature	°F	*		*	Once/quarter****	Grab
Oil and Grease	mg/L	15		10	Once/quarter****	Grab
MONITORING REPORTS SHALL BE SUBMITTED <u>QUARTERLY</u> ; THE FIRST REPORT IS DUE _____. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						
B. STANDARD CONDITIONS						
IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED <u>Parts I, II & III</u> STANDARD CONDITIONS DATED <u>October 1, 1980 and August 15, 1994</u> , AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.						

MO 780-0010 (8/91)

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Continued)

- * Monitoring requirement only.
- ** This facility is required to meet a removal efficiency of 65% or more.
- *** pH is measured in pH units and is not to be averaged. The pH is limited to the range of 6.0 to 9.0 pH units.
- **** Sample once/quarter in the months of January, April, July, and October.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS					PAGE NUMBER 3 of 5	
					PERMIT NUMBER MO-0121363	
The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective April 1, 2009 and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:						
(OUTFALL NUMBER AND EFFLUENT PARAMETERS)	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
<u>Outfall #001</u>						
Flow	MGD	*		*	Once/month	24-hour Estimate
Biochemical Oxygen Demand ₅ **	mg/L		65	45	Once/quarter****	Grab
Total Suspended Solids**	mg/L		110	70	Once/quarter****	Grab
pH – Units	SU	***		***	Once/quarter****	Grab
Ammonia as N	mg/L	*		*	Once/quarter****	Grab
Temperature	°F	*		*	Once/quarter****	Grab
Oil and Grease	mg/L	15		10	Once/quarter****	Grab
Fecal Coliform (Note 1)	#/100 mL	1000		400	Once/quarter****	Grab
Total Residual Chlorine (Note 2)	mg/L	0.019 (.13ML)		0.01 (.13 ML)	Once/quarter****	Grab
MONITORING REPORTS SHALL BE SUBMITTED <u>QUARTERLY</u> ; THE FIRST REPORT IS DUE _____. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						
B. STANDARD CONDITIONS						
IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED <u>Parts I, II & III</u> STANDARD CONDITIONS DATED <u>October 1, 1980 and August 15, 1994</u> , AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.						

MO 780-0010 (8/91)

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Continued)

- * Monitoring requirement only.
- ** This facility is required to meet a removal efficiency of 65% or more.
- *** pH is measured in pH units and is not to be averaged. The pH is limited to the range of 6.0 to 9.0 pH units
- **** Sample quarterly in the months of January, April, July, and October.

Note 1 – Final limitations and monitoring requirements for Fecal Coliform and Total Residual Chlorine are applicable only during the recreational season from April 1 through October 31.

Note 2 - This permit contains a Total Residual Chlorine (TRC) limit.

- a. This effluent limit is below the minimum quantification level (ML) of the most common and practical EPA approved CLTRC methods. The department has determined the current acceptable ML for total residual chlorine to be 0.13 mg/L when using the DPD Colorimetric Method #4500-CL G. from Standard Methods for the Examination of Water and Wastewater. The permittee will conduct analyses in accordance with this method, or equivalent, and report actual analytical values. Measured values greater than or equal to the minimum quantification level of 0.13 mg/L will be considered violations of the permit and values less than the minimum quantification level of 0.13 mg/L will be considered to be in compliance with the permit limitation. The minimum quantification level does not authorize the discharge of chlorine in excess of the effluent limits stated in the permit.
- b. Disinfection is required year-round unless the permit specifically states that “Final limitations and monitoring requirements for Fecal Coliform are applicable only during the recreational season from April 1 through October 31.” If your permit does not require disinfection during the non-recreational months, do not chlorinate in those months.

C. SPECIAL CONDITIONS

1. This permit may be reopened and modified, or alternatively revoked and reissued, to:
 - a. Comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a) (2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:
 - (1) contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
 - (2) controls any pollutant not limited in the permit.
 - b. Incorporate new or modified effluent limitations or other conditions, if the result of a waste load allocation study, toxicity test or other information indicates changes are necessary to assure compliance with Missouri's Water Quality Standards.
 - c. Incorporate new or modified effluent limitations or other conditions if, as the result of a watershed analysis, a Total Maximum Daily Load (TMDL) limitation is developed for the receiving waters which are currently included in Missouri's list of waters of the state not fully achieving the state's water quality standards, also called the 303(d) list.The permit as modified or reissued under this paragraph shall also contain any other requirements of the Clean Water Act then applicable.
2. All outfalls must be clearly marked in the field.
3. Permittee will cease discharge by connection to areawide wastewater treatment system within 90 days of notice of its availability.
4. Changes in Discharges of Toxic Substances.

The permittee shall notify the Director as soon as it knows or has reason to believe:

 - a. That any activity has occurred or will occur which would result in the discharge of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
 - (1) One hundred micrograms per liter (100 µg/L);
 - (2) Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,5 dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
 - (3) Five (5) times the maximum concentration value reported for the pollutant in the permit application;
 - (4) The level established in Part A of the permit by the Director.
 - b. That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant, which was not reported in the permit application.
 - c. That the effluent limit established in part A of the permit will be exceeded.
5. Report as no-discharge when a discharge does not occur during the report period.
6. Water Quality Standards.
 - a. Discharges to waters of the state shall not cause a violation of water quality standards rule under 10 CSR 20-7.031, including both specific and general criteria.
 - b. General Criteria. The following general water quality criteria shall be applicable to all waters of the state at all times including mixing zones. No water contaminant, by itself or in combination with other substances, shall prevent the waters of the state from meeting the following conditions:
 - (1) Waters shall be free from substances in sufficient amounts to cause the formation of putrescent, unsightly or harmful bottom deposits or prevent full maintenance of beneficial uses;
 - (2) Waters shall be free from oil, scum and floating debris in sufficient amounts to be unsightly or prevent full maintenance of beneficial uses;
 - (3) Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor or prevent full maintenance of beneficial uses;
 - (4) Waters shall be free from substances or conditions in sufficient amounts to result in toxicity to human, animal or aquatic life;
 - (5) There shall be no significant human health hazard from incidental contact with the water;
 - (6) There shall be no acute toxicity to livestock or wildlife watering;
 - (7) Waters shall be free from physical, chemical or hydrologic changes that would impair the natural biological community;
 - (8) Waters shall be free from used tires, car bodies, appliances, demolition debris, used vehicles or equipment and solid waste as defined in Missouri's Solid Waste Law, section 260.200, RSMo, except as the use of such materials is specifically permitted pursuant to section 260.200-260.247.

7. Sludge and Biosolids Use For Domestic Wastewater Treatment Facilities
 - a. Permittee shall comply with the pollutant limitations, monitoring, reporting, and other requirements in accordance with the attached permit Standard Conditions.
 - b. If sludge is not removed by a contract hauler, permittee is authorized to land apply biosolids. Permit Standard Conditions, Part III shall apply to the land application of biosolids. Permittee shall notify the department at least 180 days prior to the planned removal of biosolids. The department may require submittal of a biosolids management plan for department review and approval as determined appropriate on a case-by-case basis.

D. SCHEDULE OF COMPLIANCE

1. By April 1, 2007, the permittee shall submit an application, along with engineering plans and specifications, for a construction permit to upgrade the existing treatment facility to provide for disinfection of the effluent.
2. By April 1, 2008, the permittee shall begin construction of facility upgrades designed to bring the treatment facility into compliance with the final effluent limitations.
3. By April 1, 2009, the permittee shall complete construction of facility upgrades and demonstrate compliance with the final effluent limitations.

DRAFT

Date of Fact Sheet: June 9, 2006

Date of Public Notice: July 7, 2006

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT
FACT SHEET

This Fact Sheet explains the applicable regulations, rationale for development of this permit and the public participation process.

NPDES PERMIT NUMBER: MO-0121363

FACILITY NAME: Augusta WWTF

OWNER NAME: St. Charles Co. PWS #2

LOCATION: NW ¼, Sec. 13, T44N, R1E, St. Charles County:

RECEIVING STREAM: Bigelow's Creek (C)

FACILITY CONTACT PERSON: Tim Geraghty, P.E.

TELEPHONE: (636) 561-3737

FACILITY DESCRIPTION AND RATIONALE

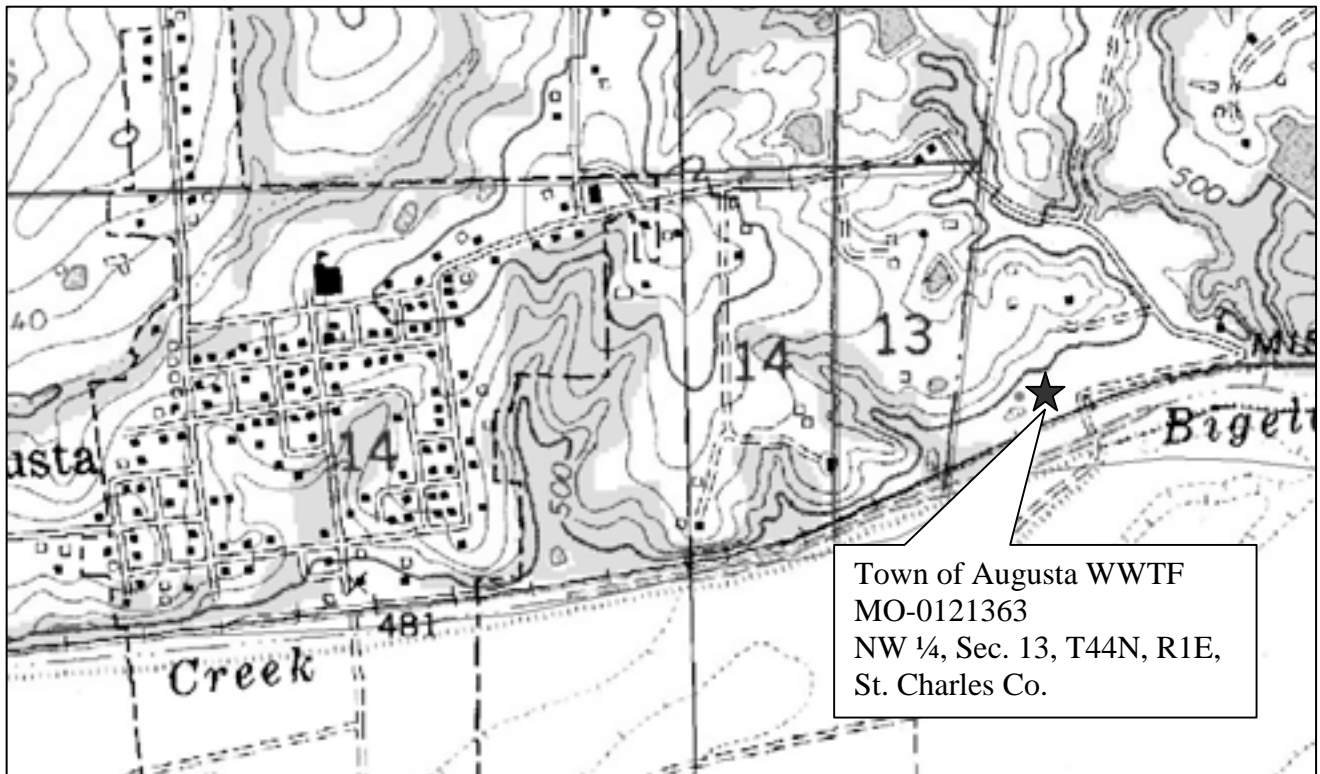
The facility is a three-cell aerated lagoon which was constructed by the Town of Augusta and placed into operation in 1999. The facility was constructed with a State Revolving Fund loan. The design consultant was Brunjes & Associates of Union, MO. A statistical analysis of data from discharge monitoring reports submitted for the months of April 2005 through March, 2006 shows that the average 5-day biochemical oxygen demand (BOD) in the effluent was 17.9 mg/L and the average total suspended solids (TSS) was 19.2 mg/L. The highest in that period was 65.2 mg/L and the highest TSS was 112 mg/L, both in May, 2005.

The effluent limits in this permit contain interim and final limits. The interim limits are the same as before for BOD and TSS and monitoring for ammonia is added to gather data for a reasonable potential analysis. The final limits include a requirement for disinfection as the discharge is to a classified stream.

In accordance with the lagoon policy recently issued by the Department, MDNR personnel will conduct an investigation of the facility to determine if the discharge is having an adverse impact on the receiving stream. If the investigation shows that the discharge is having an adverse impact on the receiving stream, this permit may be reopened and the permittee required to upgrade the treatment facility to improve the effluent quality to a level sufficient to prevent degradation of water quality in the receiving stream.

This permit will be issued for a period of five years.

LOCATION MAPS





Missouri Department of Natural Resources
Water Protection Program
Water Pollution Control Branch
NPDES Permits and Engineering Section

Water Quality Review Sheet Check List Lagoon Operating Permit Renewal

Facility Information

FACILITY NAME: Augusta WWTF PERMIT #: MO-0121363
FACILITY TYPE: 3-cell aerated lagoon AGE: 7- years

Outfall Characteristics

OUTFALL	DESIGN FLOW (MGD)	ACTUAL FLOW (MGD)	ACTUAL FLOW/DESIGN FLOW
001	.060	.030	50 %

Effluent Characteristics

Biochemical Oxygen Demand (BOD₅) In Compliance ☒ Significant Noncompliance ☐
Total Suspended Solids (TSS) In Compliance ☒ Significant Noncompliance ☐
Percent Removal (>65%) BOD & TSS In Compliance ☒ Significant Noncompliance ☐
Effluent Limit/Monitoring Requirement Frequency at regulatory minimum: Yes ☒ No ☐

Receiving Waterbody Information

WATERBODY NAME: Bigelow's Creek CLASS: C

Discharge to or within two (2) miles of a losing stream (10 CSR 20-7.031, Table J or as determined by GSRAD) ☐
Discharge to or within two (2) miles of a classified waterbody designated for whole body contact recreation ☒
Use Attainability Analysis Conducted ☐
Stream Survey Conducted within the past five (5) years ☐ Observed water quality impacts ☐

If the facility discharges to any of the waterbody types below, is within an area experiencing rapid development, or if a site-specific water quality impact study has been conducted, this form is not applicable

Lake/Reservoir ☐ 303(d) Waterbody ☐ Metropolitan No-Discharge Stream ☐
Outstanding National/State Resource Water and Drainages Thereto ☐
Outstanding National/State Resource Water and Drainages Thereto ☐